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Managing non-adherence and the 3 Cs: collaboration, cash and coercion

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On disagreements with players, the late maverick English football manager Brian Clough said: "I ask him which way he thinks it should be done ... we talk about it for 20 minutes, and then we decide I was right".

The review by Kane et al illustrates eloquently just how much we have learned about adherence and non-adherence to treatment interventions in medicine as a whole as well as psychiatry in particular in the last few decades. In reviewing activity in this field recently myself, I noted that as many as 38 systematic reviews had been published on the topic which had themselves been subject to a systematic review (1). The article also covers many diverse approaches to manage the problem, the results of which are somewhat underwhelming. It is here that I believe we should be focussing our efforts.

There are many relatively commonsense things clinicians can do to improve the uptake of medical treatment arising out of this substantial evidence base, from simplifying prescription regimens and addressing side effects, to the use of reminders and prompts. However, making an

impact on chronic, long-term conditions is not so simple and in psychiatry, uniquely, we sometimes have to contend with what might be called clashes of ideology with our patients: when they say there is nothing wrong with them or nothing that the medication can fix. Indeed, as Kane et al suggest, such illness beliefs and lack of insight are the strongest predictors of non-adherence (see 2).

Being alert to side effects of treatment – especially those effects that patients find most obtrusive – is obviously important. However, I think we over-state how much this is really driving non-adherence in psychotic disorders. Patients and clinicians alike may be biased in their perception and attribution of many negative sensations. A person who is sceptical about the value of a particular drug (or drugs in general) is likely to be acutely sensitive to any potentially adverse effect and stop taking it – but the scepticism is the real cause of the non-adherence. The introduction of second-generation antipsychotic drugs was expected to lead to a step change increase in adherence, given their much lower propensity to produce extrapyramidal side effects. This has not happened. Of course, second-generation drugs have their own profile of side effects, with weight gain being noted particularly by female patients in my clinical experience. However, if this were a major driver of non-adherence,

we might expect an objective time lag (and gender difference) between initiation of second-generation antipsychotics and serious non adherence – an interesting hypothesis? Actually, it seems that the trajectory of non-adherence is an exponential decay function like the half-life of an isotope. Roughly speaking, after every 6 months on medication, there is a 50% reduction in adherence.

So, turning to adherence enhancement in psychosis, there is again no shortage of well-conducted and thorough reviews on the topic. The first randomized controlled trial (RCT) of an intervention containing elements of motivational interviewing, cognitive-behavioural therapy, education and good clinical practice ("compliance therapy") was published in full in 1998 (3). When delivered to heterogeneous psychosis patients from South East London admitted to the Maudsley Hospital, their adherence and insight improved by the time they were discharged. Surprisingly, improvements in global functioning were maintained over the subsequent 12-18 months and readmission rates significantly reduced. An attempted replication in Dublin (4) was unsuccessful, perhaps due to low statistical power and less expertise in delivery of the intervention. Because the immediate effects of the intervention were not recorded, we do not know if the intervention

brought about useful change which faded by the time of the 1 year outcome, or whether it did not work at all.

Gray et al (5) showed that community psychiatric nurses randomly selected to receive training in the delivery of a medication management package were able to improve their patients' symptoms and adherence compared to patients under the care of control nurses. However, a large Europe wide RCT (N=327) of adherence therapy (closely modelled on compliance therapy), in comparison to a control intervention based on general health promotion, was negative (6). An important difference from the original trial was that it was based on selected outpatients with adherence problems. After 1 year, both groups improved functionally and on adherence measures, but there was no difference between the groups. The most recent study of this kind comes from the Netherlands (7). Outpatients were randomized to the intervention or treatment as usual and raters were blind to treatment allocation. One innovation of this study was the attempt to tailor the intervention called treatment adherence therapy to the more likely causes of poor adherence for each participant – although, in the majority, this was abnormal illness beliefs. The therapists were nurses with 1 week of special training. Immediate and 6 month outcomes showed significant improvements in compliance, but not other general or symptomatic outcomes.

Another approach which has been employed to promote a range of healthy behaviours, including adherence to treatment, has been to offer financial incentives – contingent monetary reinforcement. Such incentivization – when linked to antipsychotic medication in schizophrenia – raises important ethical questions. When does a reasonable incentive become an unreasonable inducement? Does this exploit poor and vulnerable people? And what if they start upping the price? A cluster RCT of a small financial incentive linked to long-acting injection (LAI) of an antipsychotic agent in sub-optimally compliant pa-

tients being followed by community mental health teams, led by Priebe in London, has just been completed and will report soon (8). Early results look promising.

LAIs or “depots”, as described by Kane et al, have long been seen as a bulwark against non-compliance. But, while making the monitoring of adherence much easier and obviating the need for reliable medication taking in a disorganized patient, LAIs do not in themselves deal with many of the more pressing factors associated with non-adherence as outlined above. While many patients, once established on depots, find them very acceptable (9) or at least as acceptable as tablets, others find them inherently coercive (10). Perhaps this has something to do with cultural expectations and values round injections or formative experiences in the lives of patients. In any event, if we wish to work collaboratively with our patients and make use of LAIs, there is clearly a lot of work to be done with this image problem.

While collaboration and shared decision making is an essential aspiration in health care, psychiatry has, throughout its history, never been able to get away from the need to give treatment involuntarily – albeit now as a last resort and with suitable safeguards. It is therefore unfortunate, in the light of the foregoing discussion of the negative perception of LAIs, that there has been a strong trend to link them with legally mandated coercion. Our experience in England is that the majority of patients placed on the newly introduced supervised community treatment legislation (community treatment orders) – an attempt to have patients spend less time in the restricting environment of the mental hospital – are treated with LAIs (11). Early audit of outcomes suggest low levels of relapse and hospitalization, but caution should be exerted before over-interpreting this kind of observational data.

In sum, our approaches to non-adherence seem to live up to the philosophy of Brian Clough quoted above. Perhaps it is the nature of the challenge

of non-adherence that we are as likely to use collaborative approaches as we are to use coercive ones.

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